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– REMARKS –

Claims 4, 11, and 16 have been cancelled, and their subject matter incorporated into their parent claims. No new matter has been added with this amendment, nor is a new search necessary.

The 35 U.S.C. §103(a) rejections of claims 1-2, 5-10, 12-14, and 17-20 as unpatentable over Lemelson in view of Myr is traversed. This rejection has been obviated by incorporating the elements of claims 4, 11, and 16 into the independent claims.

First, none of the references, alone or in combination, teach or suggest transmitting a voice query in the form of a compressed digital signal to a call center node. Lemelson teaches that the voice recognition engine is located at the vehicle (i.e. speech recognition computer 40 receives spoken commands which may be transmitted to the control center 12 at page 21, lines 11-16) and Myr teaches receiving a vocal query over a voice line (¶¶62, 75, 101 of Myr). Indeed, Myr specifically teaches away from sending a voice query as a compressed digital signal by teaching use of the voice recognition technology in a WAP environment at the MGU (¶¶73- 75 of Myr).

With respect to the rejections of the subject matter of claims 4, 11, and 16, as unpatentable over Lemelson in view of Myr in view of Aoki, the rejections remain traversed.

Lemelson in view of Myr in view of Aoki fails to teach or suggest, at least, compression algorithm compresses the voice query signal at more than two times the compression ratio of human recognizable audio data compression and wherein the formulated response is compressed to allow a user of the telematics unit to understand the formulated response as claimed in amended claims 1, 9, and 13.

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The Examiner correctly notes the failure of Lemelson or Myr, alone or in combination, to suggest any such limitation. Rather, the Examiner relies on Aoki for such a teaching. However, at most, Aoki teaches a radio communication system using variable packet length. Thus, Aoki teaches a packetization system that does not compress the data, but rather results in dividing the data so that the size of each packet is set to an appropriate size so that transmission of the packet is completed during the vehicle stay in a communication area. See, Aoki, ¶¶47-53.

Aoki teaches that when large data is downloaded from base stations to the terminal station (or vice versa), the data is divided and packetized. See, Aoki, ¶47. Additionally, when the data to be transmitted is divided into packets in this way, the size of the packet should be set to an appropriate size so that transmission of the packet is completed during the vehicle stay in a communication area. Since the time of the vehicle stay in a communication area depends on the vehicle traveling speed, the Aoki system estimates the time of the terminal station antenna stay in a communication area by detecting a vehicle speed when the vehicle enters the communication area and sets the length of the packet to be the longest as far as transmission of the packet can be completed during the stay in the communication area. See, Aoki, ¶47.

Thus, Aoki teaches *adjusting a packet size* for transmission based on vehicle speed. In contrast, the claims require *compressing* the voice query signal at more than two times the compression ratio of human recognizable audio data compression. Those of ordinary skill in the art recognize the difference between *packetization* of data, and *compression* of the data. Additionally, Aoki teaches that the degree of packetization is based on vehicle speed, rather than the claimed ratio of human recognizable audio data compression. As noted in the background, a signal intended for a human recipient cannot be maximally compressed due to the need for a human to understand the request as maximally compressed signals may not be comprehensible to humans. See, pg. 1, lines 15-19 of the specification. Furthermore, those of ordinary skill in the art would recognize that packetization and compression are entirely different concepts and processes.

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While compression ratios are known in the art, the prior art does not teach or suggest utilizing a first ratio (more than two times the compression ratio of human recognizable audio data compression) to transmit a voice query in one direction, and using a second ratio different from the first ratio (to allow a user of the telematics unit to understand the formulated response) to transmit a response to the voice query in the opposite direction. Providing speech recognition at a remote location is difficult, and has been previously complicated by multiple analog to digital conversions (see, page 1, lines 13-30 of the specification). Utilizing a 'high' ratio of compression (more than two times the compression ratio of human recognizable audio data compression) increases the amount of data, and preserves more of the original signal, that can be transmitted to the speech recognition engine using available bandwidth.

Therefore, the §103(a) rejection of claims 1, 9 and 13 as amended fails, as well as the rejections to claims 2, 5-8, 10, 12, 14, and 17-20 depending directly or indirectly from one of claims 1, 9, or 13.

The rejection of claims 3 and 15 under 35 U.S.C. §103(a) as unpatentable over Lemelson in view of Myr in further view of Gladwin is traversed. Claim 3 depends from claim 1, and claim 15 depends from claim 13, and each of claim 3 and 15 is therefore patentable over the prior art for at least the same reasons as claims 1 and 13.

The rejection of claims 4, 11, and 16 under 35 U.S.C. §103(a) as unpatentable over Lemelson in view of Myr in further view of Aoki is traversed. Each of claims 4, 11, and 16 has been cancelled, obviating the rejections. The rejection to the subject matter of claims 4, 11, and 16 has been addressed above with reference to the independent claims.

Withdrawal of the rejections to claims 1-3, 5-10, and 12-15, and 17-20 is requested.

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SUMMARY

The remarks and amendments herein supporting allowance of claims 1-3, 5-10, and 12-15, and 17-20 over the art of record obviate the Examiner's rejections of claims 1-20. The Applicants respectfully submit that claims 1-3, 5-10, and 12-15, and 17-20 herein fully satisfy the requirements of 35 U.S.C. §§ 102, 103 and 112. In view of the foregoing, favorable consideration and passage to issue of the present application is respectfully requested. If any points remain in issue that may best be resolved through a personal or telephonic interview, the Examiner is respectfully requested to contact the undersigned at the telephone number listed below.

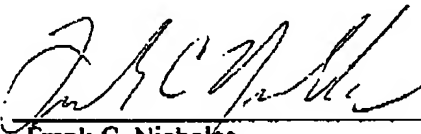
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Respectfully submitted,
WILLIAM E. MAZZARA, JR.

GENERAL MOTORS CORPORATION
General Motors Legal Staff
Mail Code 482-C23-B21
300 Renaissance Center
P.O. Box 300
Detroit, MI 48265-3000
Phone: (313) 665-4714

Anthony Luke Simon
Registration No. 34,434
Attorney for Applicants

CARDINAL LAW GROUP
Suite 2000
1603 Orrington Avenue
Evanston, Illinois 60201
Phone: (847) 905-7111
Fax: (847) 905-7113



Frank C. Nicholas
Registration No. 33,983
Attorney for Applicants